1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Formosa AD1

Taiwanese villages are laid out in three basic patterns. Probably the most common is the nucleated or compact type: the dwellings form a compact cluster which is surrounded by the arable land of the village. The second is linear, laid out along a riverbank or road, and the third, the least common, is the scattered settlement whose houses are spaced out over a larger area, which sometimes makes it difficult to determine the exact boundary of the village. Hsin Hsing, like most of the villages in the area, is a compact cluster of dwellings surrounded by farmlands. One can walk completely around the central cluster in about fifteen minutes.

The dwelling cluster is bounded on the southwest by the *hsien* dirt road which connects Lukang with the market town of Chi Hu (all of the villages in this immediate area lie on one or the other or both sides of this road) and on the northeast by an irrigation drainage stream which flows into the sea near Lukang. There are two villages quite close to Hsin Hsing. Lo Ts'e (now incorporated into Yung P'ing village) is along the road about three hundred yards to the northwest, and Ta Yu lies along the same road about eight hundred yards to the southwest. Like all the neighboring settlements, both are separated from Hsin Hsing by fields.

There are a few fields lying within the dwelling area itself. These are small, mainly garden plots, and are mostly on the outskirts rather than within the village. Hsin Hsing villagers own the fields across the road from the village as well as those between Hsin Hsing and the neighboring villages of Ta Yu and Lo Ts'e, but most of the fields operated by the villagers—either as owners or tenants—are usually not so conveniently located. Many lie to the west on the other side of the road and as much as two or three miles away. Some can be reached only by dirt roads and by narrow paths between the fields. The villagers ride their bicycles as far as they can and walk the rest of the way, often carrying heavy farm implements. A boy might go along leading or riding a water buffalo.

Village agriculture is focused primarily on wet-rice cultivation. Hsin Hsing village is located in one of the principal agricultural areas of the island, the long flat west-central coastal plain. With the Strait of Formosa to the west and the interior mountains to the east of the area, there is a natural flow of water from the mountains to the lower lands and finally to the sea. The usually plentiful water supply is harnessed by an intricate network of irrigation systems which consist of rivers, dams, pumping stations—both publicly and privately operated—and artificial waterways and ditches which eventually carry water into the maze of fields.

The area is subject to great seasonal variation in both temperature and precipitation. Although it lies in the semitropical zone—being

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Formosa AD1

just north of the Tropic of Cancer—the winters of this coastal area, unlike the interior, are cold and raw while the summers are extremely hot and humid. Winter temperatures seldom fall below the middle forties, but icy winds frequently blow with almost gale force across from the mainland and the Strait of Formosa. Although the area itself never has snow, on a clear January or February day snow-capped peaks of the high interior mountains to the east can be seen from the village.

As in most of Asia, rain is seasonal. Between 80 and 85 percent of the annual rainfall comes during the late spring and summer months (April to September) (Chen, 1950:5).[1] During the heaviest rains and the late summer typhoon season, roads as well as paddy fields are often flooded. In this particular area, frequently the rain alone makes it possible to transplant the rice seedlings, for the irrigation water is often late in reaching the Hsin Hsing area, lying as it does so far from the mountain headwaters. With the passing of the rainy season the weather is relatively dry for the remainder of the year, and all crops depend almost entirely on water from the elaborate irrigation system.

For two decades or more this area has been able to harvest three crops annually. In the irrigated areas two crops of rice are grown; sometimes a vegetable or some other crop is substituted. The third dry crop is usually wheat or sweet potatoes. On dry land, two or possibly three crops a year are grown as well. Such intensive cultivation has been made possible through a favorable climate, irrigation facilities, and an increased availability of chemical fertilizer. It has also come about partially as a result of the population increase, which has provided additional labor to work the available land and to exploit previously undeveloped lands.

Although most of the original inhabitants from the mainland settled on the relatively fertile coastal plain where Hsin Hsing is located, the land resources could not be fully exploited because of their small number. Today, this situation is reversed, and in spite of large-scale irrigation, land scarcity makes it necessary for parts of expanding families, and even whole households, to move to urban centers to find work. Land scarcity in the whole Hsin Hsing area is so severe that even villagers who remain there must go outside the village to earn a livelihood for their families or to supplement the family income. Although the problem may be unusually acute in Hsin Hsing village and in some neighboring villages, it must nevertheless be recognized that it is characteristic of a large part of Taiwan. If the population of the rural areas of the island continues to grow at its present rate, the land scarcity which is now so severe in the Hsin Hsing area will undoubtedly become a major problem for the greater part of the Taiwan countryside.

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Taiwan AD6

village area was sparsely populated. At that time, what are now the large family groups in the village were only small family units living in much smaller houses than they now do. Villagers also recall that in the late 1920's, and especially in the 1930's, the local irrigation system was expanded so that water was brought to new lands. This permitted an increase in agricultural production, particularly in rice, so that the land could support a larger population. Older villagers also speak of the introduction of new health measures by the Japanese.

Apparently, then, Hsin Hsing village and Pu Yen Hsiang follow very closely the natural demographic trends, and in this respect closely typify Taiwan as a whole. (Those differences that do exist, e.g., the sex

TABLE 2

BIRTHS, DEATHS, NATURAL INCREASE FOR HSIN HSING VILLAGE, PU YEN HSIANG, 1956–1957

		Population			Births			Deaths			Natural population increase
		Male	Female	Total	Male	Female	Total	Male	Female	Total	Births minus deaths
Hsin Hsing	1956	302	339	641	17	13	30	2	5	5	25
	1957	312	332	644	16	11	27	2	2	4	23
Pu Yen	1956	13,259	13,446	26,705	654	594	1,248	125	121	246	1,002
	1957	13,441	13,784	27,225	542	548	1,090	127	138	265	825

ratio for the area [discussed below], point up the peculiar problem of land scarcity in the Hsin Hsing area.) For the years 1956 and 1957, the *average* rates of natural increase for Hsin Hsing village and for all of Pu Yen Hsiang respectively were 37.4 per thousand persons or 3.74 percent, and 33.9 per thousand or 3.39 percent.[10] (The breakdown of this in births and deaths for these two years can be seen in Tables 2 and 3.) These rates are not too different from the figures available for all of Taiwan for the years 1955–1956. The averages for these years show a natural population increase of thirty-eight per thousand or 3.8 percent (United Nations, 1957:114–115, 192–193).[11] (See Table 4.)

The population data for Hsin Hsing village and Pu Yen Hsiang for the five years between 1953 and 1958 show that females outnumber males. In Hsin Hsing the average ratio of females to males was about 100:94.2 during those years. In Pu Yen Hsiang it was about 100:98.5. The figures indicating this can be seen in Tables 5 and 6.

In 1954 there were 105 males to every 100 females for all of Taiwan. This latter large excess of males over females includes those males

According to the April 1957, official records, 36 ninety Hsin Hsing

311 423 427 village farm families cultivated 61.74 *chia* (147.6 acres) of arable land as owners and/or tenants.[13] Of this total, 16.29 *chia* (38.9 acres) were still held by thirty-eight families as tenant land. The average amount of arable land cultivated per household was 0.68 *chia* (1.6 acres).[14]

[493] Because of the limited amount of land available, most villagers who want to buy or rent land for cultivation cannot be too particular about its location. They are usually willing to acquire any piece of land, so long as it is in the general area and can be conveniently reached by bicycle. Thus a villager's land usually consists of several tiny plots scattered throughout the surrounding countryside. On the *average, the size of the separate plot is well under 0.3 chia (0.7 acres)*, which means that villagers must spend much of their time shuttling back and forth among their scattered small fields. If the fieldwork [492] demands only a few light tools, the trip by bicycle is fast enough, but if [407] it requires a water buffalo and heavy equipment like a plow, the trip from field to field takes a great deal of time. However, having the plots scattered this way can also be an advantage: all the land cultivated by [312] one villager is not necessarily dependent upon the same irrigation ditch or even perhaps the same irrigation network. Thus a shortage of water in one waterway need not effect all of a farmer's holdings.

311 423 427 628 Many of the fields cultivated by Hsin Hsing villagers are almost two miles away, on the far side of the two neighboring villages Ta Yu and Yung P'ing. For example, in the Yung P'ing area where Hsin Hsing villagers rent or own much land, the fields are cultivated by farmers from at least three different villages. One field may be adjoined on three sides by fields owned or held by farmers from Ta Yu, Yung P'ing, or Hsin Hsing. This, of course, means these villagers will have some relationship with each other, especially if the fields are irrigated. (See Land Tenure Map, Chapter 4, for details.) The proximity of fields held by men from different villages is especially common in the area around Hsin Hsing, since the villages here are so close together that there is not very much open land between them. There are also a number of Hsin Hsing-owned wet fields beyond the two-mile range of the village, which are therefore not shown on the land map. In fact, a few villagers cultivate relatively large plots of dry land almost six miles from the village, since these crops do not usually need constant attention. In these cases the land is either tenant land still owned by public enterprises or is formerly land publicly or privately owned sold to the tenant under the Land Reform Acts of 1951–1952. The Hsin Hsing villagers originally rented these lands after the last war, when the competition for land was at its height.

423 428 [427] These fragmented and scattered landholdings result from several factors. The insufficiency of land caused villagers to buy or rent land wherever it was available. In addition, the system of inheritance of

1:Gallin E-4,5 (1957-1958) 1966
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In Hsin Hsing village, intensive cultivation of vegetables for market sale began with the onion, the red pepper, and then the green pepper. Often, too many farmers planted the same vegetable, its market price dropped, and most of them then switched to another vegetable that promised a good market. Today many farmers carefully watch the market situation and through the radio, or more usually by word of mouth, observe the fluctuations in the price of various vegetables.

A progressive farmer who hears about a new vegetable crop being grown in the area or reads about a new crop in an agricultural magazine like *Harvest Magazine* may then try to learn how to grow the same vegetable by setting aside a small portion of his land for the experiment. Such was the case with the green pepper. It was first planted in Hsin Hsing for market about 1955. By 1958 there were more than eleven farmers marketing it.

In recent years more and more land surface in Hsin Hsing, as well as in the area generally, has been given over to the cultivation of vegetables. One estimate holds that today the Hsin Hsing land devoted to market vegetables is twice what it was eight or nine years ago and still increasing. In fact, a reliable informant estimates that, exclusive of income from labor outside the area, approximately 10 percent of the village income is now derived from marketing vegetables, 70 percent from rice, 10 percent from the mint plant, 5 percent from farm labor, and 5 percent from miscellaneous sources. Such an increase in vegetable cultivation certainly represents a trend toward crop diversification, with the result that now the area is becoming much less the one-crop area (rice) for which it was formerly known.

In addition to farmers who substitute vegetable growing for partial or total rice cultivation on their land, there are a few farmers who grow mint or sugarcane. While the vegetable farmers are men who were forced by climatic or economic necessity to grow alternate crops, the mint and cane growers are men who, by virtue of sufficient land and money, can afford to gamble on reaping a greater profit from the cultivation of an alternate crop. Such men chose to grow mint or sugarcane because they are long-term crops demanding much less labor, time, and energy than is required for vegetable cultivation.

The man who grows mint instead of rice usually has contacts outside of the village. He must be familiar with the menthol oil market, and especially with the local menthol-distilling factories which can distill his mint crop for sale to the dealers. At the same time, he must have enough time to tend to all the details of arranging for the distillation and sale of the menthol. Two of the few villagers in Hsin Hsing who frequently grow mint are former landlords who have many contacts outside the village through politics and business dealings.

The mint plant, planted only once a year, yields four harvests dur-

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5

villagers in premodern Taiwan also had relationships with other villages and areas, it is evident that the recent expansion of agriculture has made the increase in their outside relations both possible and necessary. During a period of drought while I was in the village, I found the villagers both aware and concerned with whether the provincial government would hold the large mountain water resources back in order to generate electric power or would release the water earlier to be used for irrigation.

The effect that irrigation has had on the villagers' outside concerns is no different from the effect on their lives of the recently expanded operations of the Farmers' Association through its facilities and, especially, its improved extension services.

But perhaps one of the most striking changes in the village has been in land utilization—the important switch to vegetable growing, a cash crop, which necessitates a development of interest in marketing. This change in land utilization is very closely related to land tenure problems such as land scarcity and the recent important development of out-migration of villagers to the city. These will be discussed in the next chapter.

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5
Taiwan AD6

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However, there is always the possibility that there might again be an expropriation of land in excess of three *chia* of paddy. Under this same section, there is a provision that "In the event that the purchaser cannot till the land himself before its purchase price is fully paid, he may request the Government to purchase the land for resale to other farmers. The Government shall, in such case, reimburse to the purchaser in one lump sum the purchase price already paid" (T'ang, 1954: 191; the Law, Chapter IV, Article 29).

According to Article 8, tenant-cultivated land to be purchased by the government for resale to the present tiller or tillers falls into seven categories: (1) land owned by landlord in excess of the permitted retention acreage; (2) land under joint ownership (no matter how small the amount); (3) the private portion of any land owned jointly by private individuals and the government; (4) land under government trusteeship; (5) land owned by private individuals or family clans for purposes of ancestral worship and land owned by religious institutions; (6) land owned by the Shenming Hui (a popular religious association in Taiwan) and land owned by other juristic persons and corporate bodies; and (7) land which the landlord does not wish to retain and requests the government to purchase (T'ang, 1954:186; "the Law" Chapter II, Article 8).

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LAND TENURE STATISTICAL DATA FOR HSIN HSING VILLAGE

Analysis of the land tenure records covering the present period for Hsin Hsing and other villages of the area provides a fairly complete picture of the land tenure situation of the post-land reform period.[3] However, to obtain a similar picture of land tenure immediately before the inception of the Land Reform Program, it is necessary to work backwards, using the records of the post-reform period as a basis, plus those few pre-reform records which are available. One such pre-land reform record is the 1949 list of landlord-tenant contracts for Hsin Hsing village. Land tenure figures can be calculated from this list of contracts; these, not entirely accurate, still present a picture of the pre-1953 situation, which is valuable for comparative purposes.

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Prior to the Land Reform Program (see Table 15) there were 92 farming families in over 100 households in Hsin Hsing village. These cultivated about 61.5580 *chia* of land (148 acres). Of this amount, 25.8204 *chia* (63 acres) was privately owned by Hsin Hsing villagers and 35.7376 *chia* (85 acres) was leased. House lands and roads, then as today, made up an additional 2.9909 *chia* (7 acres) of uncultivated land owned by Hsin Hsing residents. (In the following pages this

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5

(In the following pages this uncultivated land will not be considered, since we are concerned only with productive land.)

Neither the total amount of land cultivated by Hsin Hsing villagers nor the actual number of farming families changed significantly as a result of the land reform. Nevertheless, there were striking internal

TABLE 13

BREAKDOWN OF TOTAL LAND CULTIVATED (OWNED AND OPERATED) AND NUMBER OF FAMILIES IN EACH CATEGORY IN HSIN HSING VILLAGE FOR PRE-LAND REFORM (1949–1951) AND POST-LAND REFORM (1957)

Land classification	1949–1951 Area *chia*	1949–1951 Number of families	1957 Area *chia*	1957 Number of families
Privately owned (individual, joint, corporate)	25.8204	62	29.5567	82
Land reform land	—	—	15.3716	56
Tenanted land	35.7376	58	16.2925	38
Total number of farming families	—	92	—	90
Total land surface cultivated	61.5580	—	61.2208	—
House and other uncultivated lands	2.9909	—	2.9909	—
Total land surface owned and operated, cultivated and uncultivated	64.5489	—	64.2117	—

changes in the land tenure situation in the village, especially after the Land-to-the-Tiller Act of 1953, which greatly affected the figures on landownership and tenancy. Privately owned land rose to 29.5567 *chia* (71 acres), and an additional 15.3716 *chia* (37 acres) of leased land sold to the former tenants under the 1953 act caused tenancy to decline to 16.2925 *chia* (39 acres).[2]

EFFECTS OF THE LAND REFORM PROGRAM

The 61.5580 *chia* of land cultivated by Hsin Hsing villagers at the time of the 1949 "Regulations Governing the Lease of Private Farm Lands in Taiwan Province" was of two types: leased land and privately owned land. (See Tables 13 and 14.) Of this, 35.7376 *chia*, or 58.1 percent of the total, was rented by fifty-eight Hsin Hsing village households. Actually, there were a few more tenants, working a few very small plots of land, who were not recorded or given contracts in 1949. These few had been persuaded by their landlords to allow themselves to be classed as laborers instead of tenants. The remaining

[text continues on p. 101 -- Analyst]

1:Gallin E-4,5 (1957-1958) 1966
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HSIN HSING VILLAGE
LAND TENURE MAP

Map 4. Land tenure map for Hsin Hsing village. Data from Lukang Land Office and Pu Yen Hsiang Public Office Land Section. Data as of 1957 except for land tenancy, which is as of August, 1958.

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5

25.8204 *chia* of cultivated land was privately owned by Hsin Hsing villagers under individual, joint, or corporate ownership. The largest part of all cultivated land was paddy land. (See Table 14.)

Most of the leased land in 1949 was owned by 25 different private landlords. A small part belonged to publicly owned enterprises. Of these twenty-five private landlords, only two were Hsin Hsing villagers; they owned about 5.2 *chia* of land or about 14.6 percent of the total leased land—almost all of which they rented out to fellow villagers. (See Table 15.) Of the remaining leaseholds, 28.5

TABLE 14

AREA AND TYPES OF LAND CULTIVATED BY 92 HSIN HSING HOUSEHOLDS BEFORE LAND REFORM, 1951

Land type	Paddy field	Dry field	Total (*chia*)	Percentage (*chia*)
Owner-cultivated	25.4867	0.3337	25.8204	41.9
Tenanted	31.9950	3.7426	35.7376	58.1
Totals	57.4817	4.0763	61.5580	100.0

TABLE 15

OWNERSHIP OF HSIN HSING VILLAGE TENANTED LAND, 1949–1951

	Total number of *chia* Hsin Hsing tenanted land	Hsin Hsing tenanted land owned by Hsin Hsing landlords	Hsin Hsing tenanted land owned by private outside landlords [a]	Hsin Hsing tenanted land owned by public enterprises
Amount of tenant land	35.7	5.2	28.5	2.0
Percent of tenant land	100.0	14.6	79.8	5.6
Number of private landlords	25.0	2.0	23.0	—

[a] Landlords living outside Hsin Hsing village as well as outside the area.

chia or 79.8 percent of the total was owned by 23 private outside landlords. Thirteen of them, owning over 19 *chia* of this land, lived in the two villages adjacent to Hsin Hsing, Ta Yu and Yung P'ing. The other ten, owning 9 *chia*, lived in more distant villages or in the cities and had little direct contact with their Hsin Hsing tenants. The remaining two *chia* of tenant land was public land, owned by public enterprises such as the Taiwan Sugar Corporation.

By 1954, the three-step program of land reform had been completed, and the almost 36 *chia* of leased land that had been cultivated by Hsin

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5

Hsing villagers had been reduced to slightly over 16 *chia*. Almost 4 *chia* of the privately owned portion of tenant land had been sold by the owners to their Hsin Hsing tenants after the 1951 Rent Reduction Act (and before the 1953 act of expropriation). More than 2 *chia* of public land, eight plots rented to four Hsin Hsing villagers, were made available to these farmers for purchase over a ten-year period by virtue of the 1951 Land Act which governed the sale of public farmlands. And in 1953, under the Land-to-the-Tiller Act, the government purchased an additional 13.5 *chia* (in forty-six plots) of privately

TABLE 16

AREAS AND TYPES OF LAND CULTIVATED BY 90 HSIN HSING HOUSEHOLDS AFTER LAND REFORM, 1957

	Paddy field	Dry field	Total (*chia*)	Percent (*chia*)
Owner-cultivated	42.2545	2.6938	44.9283	73.4
Tenanted	14.9100	1.3823	16.2925	26.6
Total	57.1445	4.0763	61.2208	100.0
Percentage	93.3	6.7	—	—

TABLE 17

AREAS OF CULTIVATED LANDS IN HSIN HSING VILLAGE BEFORE AND AFTER IMPLEMENTATION OF LAND-TO-THE-TILLER PROGRAM

	Before implementation		After implementation (1957 records)	
	Area (*chia*)	Percent	Area (*chia*)	Percent
Owner-cultivated	25.8	41.9	44.9	73.4
Tenanted	35.7	58.1	16.3	26.6
Total	61.5	100.0	61.2	100.0

owned Hsin Hsing tenant land from the landlords and made it available to the 33 former tenants for eventual ownership. One of these 33 families had also purchased public land under the 1951 act.

With the completion of the Land Reform Program of 1953, the land tenure picture for Hsin Hsing village had changed radically. According to the September, 1957, records, as a direct or indirect [8] result of the land reform, the amount of land leased by villagers was reduced by almost 55 percent from 35.7 *chia* of land in 1949 to 16.29 *chia* in 1957. Whereas in 1949 land leased by villagers had represented 58.1 percent of the total cultivated land, by 1957 it was reduced to 26.6 percent of the total. (See Tables 13, 14, 16, and 17.) (See Map 4 for distribution of village landholdings.)

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5

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Prior to land reform, 14.6 percent of the leased land in Hsin Hsing was owned by Hsin Hsing villagers and 85.4 percent by outsiders, including public enterprises. (See table 14.) After land reform, in 1957, only about 9.1 percent of the leased land was village owned; 90.9 percent was owned by outsiders. (See Table 18.)

TABLE 18

TENANTED LAND IN HSIN HSING VILLAGE, 1957

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	Paddy (*chia*)	Dry (*chia*)	Total	Percent
Land surface tenanted	14.9100	1.3825	16.2925	100.0
Tenanted land owned by Hsin Hsing landlords	1.4753	—	1.4753	9.1
Tenanted land owned by landlords outside Hsin Hsing	13.4347	1.3825	14.8172	90.9

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In the pre-land reform period (1949–1951), of the 92 farming households in Hsin Hsing village, 58 households (63.0 percent) were tenants, and of these 30 (or 32.6 percent of the village's farming households) owned no land whatsoever. (See Table 19.) In the post-land reform

TABLE 19

NUMBER OF FARMING FAMILIES IN HSIN HSING BY SIZE OF CULTIVATED LAND, 1951

Amount cultivated in *chia*	Own all land	Mixed owner-tenant owns more than half	Mixed owner-tenant owns less than half	Pure tenant	Total number of farming families	Percent of farming families
Less than 0.1	4	—	—	—	4	4.3
0.1–0.5	6	1	1	7	15	16.3
0.5–0.5	8	—	6	8	22	23.9
0.5–1.0	9	2	11	12	34	37.0
1.0–1.5	4	1	3	2	10	10.9
1.5–2.0	2	—	—	1	3	3.3
2.0–2.5	1	—	—	—	1	1.1
2.5–3.0	—	1	1	—	2	2.2
Over 3.0	—	1	—	—	1	1.1
Number of families	34	6	22	30	92	—
Percent of families	37.0	6.5	23.9	32.6	—	100.1

period, the 1957 records show ninety farming households listed in the village of whom only 38 (42.2 percent) were tenant households; of these only 9 (10 percent of the total number of farming households)

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5

owned no land, while the remaining 29 tenant householders were partial landowners as a result of the Land Reform Acts. (See Table 20.)

TABLE 20

NUMBER OF FARMING FAMILIES IN HSIN HSING BY SIZE OF CULTIVATED LAND, 1957

Amount cultivated in *chia*	Own all land	Mixed owner-tenant owns more than half	Mixed owner-tenant owns less than half	Pure tenant	Total number of farming families	Percent of farming families
Less than 0.1	4	—	—	—	4	4.4
0.1–0.3	12	1	—	3	16	17.8
0.3–0.5	11	5	1	3	20	22.2
0.5–1.0	18	9	7	2	36	40.0
1.0–1.5	5	2	1	1	9	10.0
1.5–2.0	2	—	—	—	2	2.2
2.0–2.5	—	—	—	—	—	—
2.5–3.0	—	2	—	—	2	2.2
Over 3.0	—	1	—	—	1	1.1
Number of families	52	20	9	9	90	—
Percent of families	57.8	22.2	10.0	10.0	—	99.9

TABLE 21

AREA OF FARMS CULTIVATED BY 36 FARMERS WHO PURCHASED LAND THROUGH LAND REFORM, 1957

Kinds of farmland	Area in *chia*		Percent
Land purchased under Land-to-the-Tiller Program		15.3716	59.6
Paddy field	13.0115		—
Dry land	2.3601		—
Land originally owned and cultivated by farmers themselves		4.5224	17.5
Paddy field	4.4374		—
Dry land	0.0850		—
Leased land		5.8980	22.9
Paddy field	4.7665		—
Dry land	1.1315		—
Total area		25.7920	100.0
Paddy field	22.2154		86.1
Dry land	3.5766		13.9

The rest of the land worked in Hsin Hsing in the post-land reform period consisted of the already mentioned 15.3716 *chia* purchased either under the 1951 act for the sale of public land or the 1953 Land-to-the-Tiller Act, plus the 29.5567 *chia* owned by the villagers as indi-

1:Gallin E-4,5 (1957-1958) 1966
AD5 Taiwan Hokkien AD5

vidual, joint, or corporate owned land. However, if one considers the 15.3716 *chia* of land which changed ownership under land reform as 423

TABLE 22

NUMBER OF FAMILIES PURCHASING LAND UNDER LAND-TO-THE-TILLER PROGRAM, AND AREA OF FARMS THEY CULTIVATE
Part A. Pre-Land Reform (1949–1951)

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Size of class (*chia*)	Number of farmers later to purchase land		Area of farms cultivated (*chia*)			
	Number of families	Percent	Paddy field	Dry field	Total area	Percent
Landless: farmers owning no land	19	52.8	—	—	—	—
Less than 0.1 (*chia*)	4	11.1	—	0.0610	0.0610	1.3
0.1–0.5	7	19.4	1.0425	0.0240	1.0665	23.6
0.5–0.5	3	8.3	1.0784	—	1.0784	23.8
0.5–1.0	3	8.3	2.3165	—	2.3165	51.2
1.0–1.5	—	—	—	—	—	—
1.5–2.0	—	—	—	—	—	—
2.0–2.5	—	—	—	—	—	—
2.5–3.0	—	—	—	—	—	—
Over 3.0	—	—	—	—	—	—
Total	36	99.9	4.4374	0.0850	4.5224	99.9

TABLE 22

NUMBER OF FAMILIES PURCHASING LAND UNDER LAND-TO-THE-TILLER PROGRAM, AND AREA OF FARMS THEY CULTIVATE
Part B. Post-Land Reform (1957)

Size of class (*chia*)	Number of farmers to purchase land		Area of farms cultivated including previously owned land (*chia*)			
	Number of families	Percent	Paddy field	Dry field	Total area	Percent
Landless: farmers owning no land	—	—	—	—	—	—
Less than 0.1 (*chia*)	2	5.5	0.3369	0.0130	0.3499	1.8
0.1–0.5	7	19.4	1.3773	0.2600	1.6373	8.2
0.5–0.5	10	27.8	3.6438	0.2482	3.8920	19.6
0.5–1.0	15	36.1	7.7481	0.5918	8.3399	41.9
1.0–1.5	3	8.3	3.5210	—	3.5210	17.7
1.5–2.0	—	—	—	—	—	—
2.0–2.5	1	2.8	0.8218	1.3321	2.1539	10.8
2.5–3.0	—	—	—	—	—	—
Over 3.0	—	—	—	—	—	—
Total	36	99.9	17.4489	2.4451	19.8940	100.0

3: Wolf F-5 (1959-1961) 1968 AD5 Taiwan Hokkien AD5
Peihotien

Not all of the people in Peihotien have seen ghosts and certainly not all of them believe in ghosts, but there is not a perfect correlation between a man's belief in ghosts and his level of sophistication in other matters. One of my favorite scoffers in the village is a no-nonsense woman about fifty years old. After listening to some men tell me about the habits of ghosts, she laughed and told me what she thought about ghosts. "I'm always walking around at night and I've never once seen a ghost. When I used to gamble, I wandered around even more at night. I would go all the way to Nanhotien to gamble, come back at midnight for more money, and walk all the way back again. I never met a ghost or even worried about one. Remember where old Ong hung himself on that tree behind their house? Just a few days after his suicide we were gambling at Tan's house. A policeman came and we all had to run and the only way was under that tree. None of us held back. If there was a ghost there, it would been trampled to death we were running so fast. When you are gambling you aren't afraid of the King of Hell. How could you be afraid of a ghost?"

Considering the affinity of ghosts for isolated spots, it seems unlikely that many could stick it out for long in Peihotien. There is very little land within the village that isn't tamed by houses or pig pens or kitchen gardens. Unused land is more or less public property and is crossed and recrossed by dozens of people each day. The square directly behind the house in which we lived is a good example. It is flanked on three sides by houses and on the fourth by the main path through the village. A family who supplements their income by making noodles has set up stretching racks in one corner. Years of use has made the surface of the square as hard and smooth as concrete, ideal for a drying ground. During certain seasons its entire upper half is carpeted with fat rice grains which are turned every few hours for uniform drying. Since the square is public, the families who use it must keep a child stationed there to drive off stray chickens and ducks. Two or three times each summer traveling medicine peddlers set up their makeshift stages in the square, give free performances, and then try to sell their wares to the crowds they attract. Sometimes their acts are elaborated by costumes and a squawking loudspeaker; more often they are simple, lighted by a single electric globe rented from one of the families on the square. During the day a peddler may cycle into the village and spread out his merchandise in the square. The women often do not buy anything and leave the poor peddler to fold his goods back into his box and pedal off to the next village.

The amount of annual taxes varies considerably according to the classification and grade and various government land reform acts affected only certain categories of land. The most important and valuable kind of land is that classified as paddy field, most of it grade 12 or 13. The grade number assigned reflects productivity and consequently taxes, the higher the number, the lower the value. The current market price is $180,000.00 per chia, nearly $1,900.00 U.S. per acre.

As pointed out in the section on topography, Sanlei is in a narrow valley between two small mountain chains. The only paddy land is on the terraced steps which comprise the valley floor between the sharply rising foothills. Paddy land totals only 13.2920 chia (see Table 3), less than 32 acres. This is divided into 200 plots ranging in size from .0002 chia to .4716 chia. The mean size is .0665 chia (.16 acres), but this figure does not faithfully portray the real situation for the mean has been increased by a few larger plots. The median figure of .0350 (.08 acres) indicates that fifty per cent of the plots are less than half the mean. This extreme case of land fragmentation is partially due to a historical accident and partially due to the normal Chinese inheritance pattern.

As previously stated, Sanlei was founded around 1830 by 18 hu (households) from the same community in

311 Table 3. Sanlei Land Types and Distribution
*In chia (One chia equals 2.39 acres)

Land Category	Number of Plots	Median Size*	Mean Size*	Area Total*
Paddy	200	.0350	.0665	13.2920
Dry	124	.0435	.1698	21.0568
Woods	103	.1440	.2936	30.2435
House	61	.0185	.0228	1.5066
Burial	17	.0230	.1629	2.7685
Other	34	.0238	.0564	1.9188
			TOTAL	70.7862

175 Fukien. According to informants and confirmed by family
423 histories, the original land was improved and brought into
311 cultivation by the 18 hu acting as a corporate group. The
423 earliest settlement was a walled fort, frequently under attack by the aborigines who inhabited the nearby mountains. While some men worked in the fields, others were detailed as lookouts and guards. The lands were owned jointly and produce was shared communally. After a few short years (the exact date is uncertain), a decision was made to divide the land. There are suggestions that this was the original plan but there are also strong hints that the division process was one that caused considerable discord and may have been the outgrowth of a previous conflict. In any case, each large piece of land, by type and location, was divided into 18 equal plots, one for each household. The matching of household to plot was accomplished by withdrawing a slip of paper from a hat with chopsticks. Since there were several original large plots,

423 piece for a .005 chia piece plus a sum of cash, and was the culmination of a two-year negotiation process.

311 243 The registered plot sizes are not directly related to the size of the paddy fields. Larger plots may be divided into two or more fields and some smaller plots are combined into one field. Both the extreme fragmentation and the narrowness of the terraces contribute to the small size of paddies. Correlated with the small size is the complete absence of gasoline-powered cultivators which have become so popular on the plains. This degree of fragmentation does not permit the most efficient use of the land. The government has begun a program of land consolidation in other parts of the island (Department of Information, Taiwan Provincial Government, 1962:78-83). Although villagers are aware of the program and believe it would be a valuable step for the village, everyone fears he would not get a reasonable share in a government-ordered consolidation, i.e., he would give up pieces more valuable than he would receive. Although theoretically the process should be seen as a zero-sum game, no villager can be found who thinks he would be a winner or even break even.

311 423 659

423 427 656 Prior to the above-discussed land consolidation, Taiwan underwent an extensive land reform program which proceeded through three steps. The first step was rent reduction, enforced in April of 1949, which limited farm

423 chia of paddy land two years prior to the Land-to-the-Tiller act. Due to its location, they let it out to a tenant and, in turn, rented as tenants an equivalent piece adjacent to their respective main holdings. They lost the purchased piece to the tenant but were unable to claim the rented equivalent piece since it was owned by a small landlord, one with less than 3.0 chia. There were several [601] similar cases in the li. Often there was bitterness generated in the exchanges for the landlord-tenants were sometimes ch'in t'ang (agnatic relatives by virtue of possessing the same surname) and even ch'in tsu (agnatic relatives with demonstrated descent).

311 The second most important category was dry land which was quite fragmented but less so than paddy land. The total of 21.0568 chia is divided into 124 plots for a mean size of .1698 chia. The range is from .0003 chia to 2.5435 chia. The medium of .0435 chia once again indicates most plots are considerably smaller than the mean.

244 This land is devoted primarily to tea, oranges, sweet po-
245 tatoes and miscellaneous vegetables. The biggest plot,
311 2.5435 chia, is a single tea farm cultivated by hired labor but owned by a Sanlei villager. Dry land typically is grade 19, less valuable than paddy fields.

311 The third and largest category is mountain or wooded land, 30.2435 chia. Some of this has been left in

311 natural vegetation and forestation but much is being developed. A considerable quantity of the mountain land in [423] Sanlei and also outside village boundaries is owned by the government. Some has been purchased by villagers for the 427 government is encouraging its development. Prior to 1962, 435 it was leased by the government for 25% of the main crop but now, rent is fixed and reasonable, on long-term leases 435 at $380.00 per chia per year. The current price of mountain land is about $20,000.00 per chia if undeveloped and ranging up to $100,000.00 per chia if planted with excellent crops such as mature fruit trees.

361 The remaining categories are important but not 311 economically significant. Houseland land is that on which the house is built but also includes the very small vegetable gardens adjacent to the houses. Vegetable gardens are located near the house so as to be convenient for the deposit of night soil. Burial land takes up a considerable part of the community. As previously stated, this area has many good feng shui locations, most of them on steep slopes. Other types of land categories include temple, roads, and worthless plots.

423 The vast majority of the land in Sanlei remains either owner-cultivated or leased from the government. Moreover, the owner-cultivators tend to live in Sanlei or 427 an adjacent village. Some tenants are renting from a fellow villager as illustrated by the neighbor who leases

423 owners participated because of a fear the improved land
[651] would be given a higher grade resulting in increased taxes. Although reassessment has still not occurred, non-participants keep saying it soon will.

Irrigation

132 Rainfall in northern Taiwan is reasonably adequate
133 every month of the year. There are small mountains running parallel to the village on each side with a small
312 stream down the middle. The mountains produce a considerable water run-off which is channeled to the paddy fields where needed. Only about once every seven or eight years is there a serious shortage of water but there are slight shortages yearly in June and July. There are no water irrigation associations because there is so much surplus water and so many places that it can be tapped, that the small short channels are maintained informally by farmers in the few fields using each source. Only once in fifteen months did we observe a conflict over water levels in spite of these extremely informal arrangements. However, children get in trouble when they play in the fields and break down the barriers and let water fall below requisite levels.

Rice

243 Paddy fields are considered to be the most valuable
• 311 kind of agricultural land. From the earliest inception of

243 the village, the flat land has been largely devoted to
• 311 irrigated fields for the cultivation of rice. As specified above, the available water from the mountainsides has al-
243 ways permitted irrigation with a minimum of effort. Sanlei
433 is a double-cropping area, most paddy fields having two crops of rice each year with the occasional substitution of sweet potatoes for rice. In the last ten to fifteen years, there has been the inauguration of a third crop of vegetables in the paddy fields for about half of the fields while the other half stands idle.

242 There are two major varieties of rice, the native
243 tsai lai and the p'eng lai[1] which was introduced by the
[177] Japanese. P'eng lai has a much higher yield, brings a better market price, and especially important today, is much more responsive in yield increase to applications of fertilizer. However, it is somewhat less resistant to weather, insects, and disease, the latter two especially significant for the second crop. According to local in-
[134] formants, p'eng lai requires rich and deep soil. Since the good soil in Sanlei is about four to six inches deep, insufficient for p'eng lai, experiments with p'eng lai have often proved disastrous and today, only two or three farmers plant it and only in fields closest to the bottom of the valley, next to the river. As a result, tsai lai is the major form grown in Talei Li.

313 [443] are so low a yard is ready to buy more wood.

• [311] A great deal of the mountain land is devoted to [435] wood, especially many of the steeper slopes. The contiguousness of the village to the city of Taipei helps make the wood valuable for its relatively low price per unit of volume would soon consume any long-distance transportation cost.

313 [482] Wood bundles are heavy and usually, given the long distance to the forests, must be carried by hand down the mountains to the roadside or village. Wood for sale is [462] usually carried by men on a piece-work basis with the rate adjusted according to the distance to be traveled. The [465] rate is such that it is difficult to earn the $50.00 level of men's regular wages without a dawn to dusk effort but $40.00 to $45.00 can usually be achieved in the regular 8-1/2 hour day and this is higher than regular women's wages.

462 In agreement with the principle that females are responsible for the kitchen, a woman carried most of the wood used for cooking in her own home. Men may carry wood for their wives on the way home from some other task, but if a special trip must be made for wood to be used in the kitchen, it is expected that a woman will make it.

316 Non-Agricultural Employment

The major means by which Talei Li men earn a living outside farming is in the coal mines which have been